

**Table S22 As main analysis but using case and first control pairs only**

Model includes cumulative radon exposure, cumulative gamma-ray exposure and quintiles of Carstairs index of deprivation

Exposure period taken as birth to diagnosis

ICCC3 codes	Diagnostic grouping	Number of Cases	Number of Controls	Relative Risk										Carstairs Quintiles		
				Radon			Gamma			Carstairs			Quintiles			
				RR <sup>a</sup>	95% CI	p	RR <sup>b</sup>	95% CI	p	RR <sup>c</sup>	95% CI	p	RR <sup>c</sup>	95% CI	p	
11	Lymphoid Leukaemia	7249	7249	1.22	0.90	1.65	0.19	<b><u>1.12</u></b>	1.03	1.21	0.007	<b><u>0.96</u></b>	0.94	0.99	0.005	
12	Acute Myeloid Leukaemia	1314	1314	0.83	0.41	1.70	0.61	1.00	0.85	1.17	0.99	0.95	0.89	1.02	0.16	
13-15	Other Leukaemia	474	474	1.27	0.42	3.83	0.67	1.22	0.89	1.67	0.21	1.10	0.99	1.23	0.09	
11-15	Total Leukaemia	9037	9037	1.15	0.88	1.49	0.30	<b><u>1.10</u></b>	1.02	1.18	0.010	<b><u>0.97</u></b>	0.94	0.99	0.008	
21	Hodgkin's disease	935	935	1.38	0.73	2.60	0.32	0.99	0.87	1.12	0.85	1.03	0.95	1.12	0.42	
22	Non-Hodgkin Lymphoma	980	980	1.58	0.74	3.38	0.24	1.13	0.96	1.32	0.15	<b><u>1.09</u></b>	1.00	1.18	0.04	
21-25	Total Lymphoma	2312	2312	1.38	0.89	2.15	0.15	1.01	0.92	1.11	0.80	<b><u>1.05</u></b>	1.00	1.11	0.05	
11,22 11-15, 22	Lymphoid Leukaemia + NHL	8229	8229	1.26	0.95	1.66	0.11	<b><u>1.12</u></b>	1.04	1.21	0.002	0.97	0.95	1.00	0.05	
22	Total Leukaemia + NHL Brain/CNS (including	10017	10017	1.19	0.92	1.52	0.18	<b><u>1.10</u></b>	1.03	1.18	0.003	0.98	0.95	1.00	0.06	
31-36	Benign)	6565	6565	1.06	0.79	1.42	0.70	1.04	0.97	1.11	0.27	0.98	0.95	1.01	0.14	
41-122	Other malignant tumours	9463	9463	0.96	0.76	1.20	0.70	1.01	0.95	1.07	0.76	0.98	0.96	1.00	0.11	
21-122	Not Leukaemia	18340	18340	1.04	0.88	1.23	0.64	1.02	0.98	1.06	0.33	0.99	0.97	1.01	0.18	
11-122	Total Childhood Cancer	27377	27377	1.07	0.93	1.23	0.34	<b><u>1.04</u></b>	1.00	1.08	0.03	<b><u>0.98</u></b>	0.97	1.00	0.009	

<sup>a</sup>RR for each  $10^3$  Bq/m<sup>3</sup> - years increase in cumulative radon exposure<sup>b</sup>RR for each mGy increase in cumulative gamma-ray exposure<sup>c</sup>RR for each quintile increase on the Carstairs Index of deprivationRRs in bold are significantly different from 1.00 ( $P<0.05$ ), RRs in bold and underlined are significantly different from 1 ( $P<0.01$ )